

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P894180

Luminaire Tested: 4MB-SC3-ASYMR-UNV-CC93-HI-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894180
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-ASYMR-UNV-CC93-HI-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 3500K CCT, HI luv setting
Light Source: -
Ballast/Driver: -

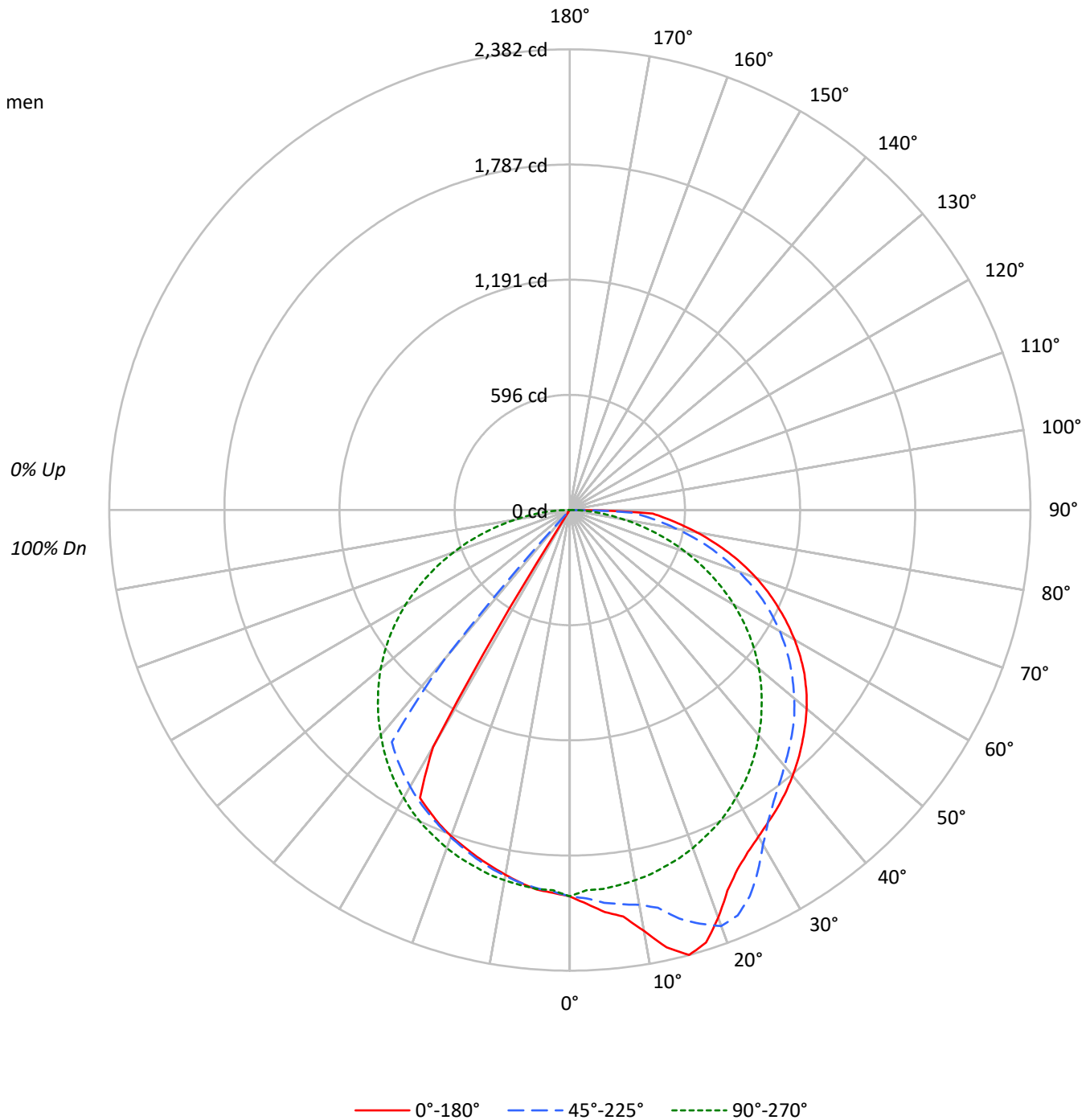
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5404.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 50.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100	
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	85	85	83	
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	71	71	71	69	
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	61	61	61	59	
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50	
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44	
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39	
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	35	
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	33	33	33	31	
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	30	30	30	28	
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	27	27	27	26	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	25935	25935	25935	25935	25935
5°	27198	26571	25631	25587	25677
10°	29141	27331	25627	25325	25250
15°	32018	29403	25636	25082	24959
20°	30999	31630	25704	24881	24803
25°	29371	31566	25765	24798	24617
30°	29244	29965	25762	24768	21200
35°	29740	29140	25804	24770	290
40°	30386	29281	25770	17083	193
45°	31216	29872	25775	316	127
50°	32306	30619	25789	230	46
55°	33537	31491	25715	156	25
60°	34878	32561	25490	60	29
65°	36520	33847	25026	71	71
70°	38957	35266	24234	87	87
75°	42645	37533	23189	231	115
80°	50041	42003	21469	344	172
85°	74479	58969	20113	507	343

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 127709 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.4	3.5
10°-20°	571.5	10.6
20°-30°	878.4	16.3
30°-40°	941.4	17.4
40°-50°	855.0	15.8
50°-60°	779.9	14.4
60°-70°	580.2	10.7
70°-80°	408.4	7.6
80°-90°	197.8	3.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1641.3	30.4
0°-40°	2582.7	47.8
0°-60°	4217.6	78.0
0°-90°	5404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5404.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1997	1997	1997	1997	1997	
5°	2087	2038	1966	1963	1970	202
15°	2382	2187	1907	1866	1857	658
25°	2050	2203	1798	1731	1718	953
35°	1876	1838	1628	1563	18	1175
45°	1700	1627	1404	17	7	1313
55°	1481	1391	1136	7	1	1323
65°	1189	1102	814	2	2	1177
75°	850	748	462	5	2	896
85°	500	396	135	3	2	502
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1997.3	1997.3	1997.3	1997.3	1997.3	1997.3	1997.3	1997.3	1997.3
2.5°	2038.5	2015.6	2009.9	2025.9	1967.6	2006.5	1974.5	1981.3	1981.3
5°	2086.6	2054.5	2038.5	2033.9	1966.4	1992.8	1963.0	1963.0	1969.9
7.5°	2119.7	2084.3	2055.7	2044.2	1956.1	1979.0	1944.7	1944.7	1944.7
10°	2210.1	2143.8	2072.8	2052.2	1943.6	1960.7	1920.7	1923.0	1915.0
12.5°	2316.5	2257.0	2106.0	2048.8	1929.8	1937.8	1895.5	1894.4	1885.2
15°	2381.7	2337.1	2187.2	2044.2	1907.0	1913.8	1865.8	1862.3	1856.6
17.5°	2345.1	2338.2	2243.3	2040.8	1886.4	1880.6	1832.6	1829.2	1824.6
20°	2243.3	2260.4	2289.0	2033.9	1860.1	1848.6	1800.6	1798.3	1794.9
22.5°	2130.0	2147.2	2268.4	2045.4	1828.0	1814.3	1766.3	1764.0	1759.4
25°	2050.0	2050.0	2203.2	2072.8	1798.3	1773.1	1730.8	1727.4	1718.2
27.5°	1993.9	1983.6	2106.0	2103.7	1760.5	1731.9	1693.0	1689.6	1678.2
30°	1950.4	1933.3	1998.5	2118.6	1718.2	1687.3	1651.9	1648.4	1413.9
32.5°	1911.5	1893.2	1908.1	2131.2	1675.9	1639.3	1608.4	1147.4	50.3
35°	1876.1	1855.5	1838.3	2122.0	1627.8	1591.2	1562.6	33.2	18.3
37.5°	1836.0	1820.0	1781.1	2074.0	1576.4	1539.8	1512.3	18.3	16.0
40°	1792.6	1777.7	1727.4	2003.1	1520.3	1489.4	1007.8	16.0	11.4
42.5°	1748.0	1736.5	1677.0	1900.1	1464.3	1433.4	32.0	12.6	9.2
45°	1699.9	1689.6	1626.7	1775.4	1403.6	1375.0	17.2	9.2	6.9
47.5°	1650.7	1635.8	1574.1	1641.6	1341.8	1313.3	14.9	6.9	4.6
50°	1599.2	1583.2	1515.7	1523.7	1276.6	1248.0	11.4	4.6	2.3
52.5°	1542.0	1522.6	1454.0	1417.3	1208.0	1181.7	9.2	2.3	1.1
55°	1481.4	1459.7	1391.0	1324.7	1135.9	1106.2	6.9	2.3	1.1
57.5°	1413.9	1389.9	1324.7	1236.6	1059.3	748.1	4.6	2.3	1.1
60°	1343.0	1319.0	1253.8	1154.2	981.5	51.5	2.3	2.3	1.1
62.5°	1267.5	1242.3	1179.4	1070.7	898.0	42.3	2.3	2.3	2.3
65°	1188.6	1158.8	1101.6	984.9	814.5	35.5	2.3	2.3	2.3
67.5°	1109.6	1071.9	1018.1	896.9	728.7	29.7	2.3	2.3	2.3
70°	1026.1	984.9	928.9	807.6	638.3	24.0	2.3	2.3	2.3
72.5°	940.3	900.3	839.7	717.3	553.7	18.3	2.3	2.3	2.3
75°	850.0	813.3	748.1	626.9	462.2	13.7	4.6	2.3	2.3
77.5°	756.1	727.6	654.3	534.2	372.9	9.2	4.6	2.3	2.3
80°	669.2	637.2	561.7	440.4	287.1	6.9	4.6	3.4	2.3
82.5°	580.0	551.4	475.9	354.6	205.9	5.7	4.6	3.4	2.3
85°	499.9	472.4	395.8	276.8	135.0	4.6	3.4	3.4	2.3
87.5°	429.0	403.8	328.3	202.5	76.6	3.4	3.4	3.4	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	25.84	27.46	26.21	27.77	28.09	21.28	22.89	21.64	23.20	23.52
	3H	28.29	29.75	28.67	30.08	30.44	21.92	23.38	22.29	23.71	24.07
	4H	29.41	30.80	29.81	31.14	31.52	22.06	23.44	22.46	23.79	24.17
	6H	30.51	31.79	30.92	32.16	32.55	22.10	23.39	22.51	23.75	24.14
	8H	31.04	32.26	31.46	32.65	33.05	22.09	23.32	22.52	23.71	24.11
	12H	31.60	32.78	32.03	33.16	33.59	22.07	23.25	22.50	23.63	24.06
4H	2H	26.50	27.88	26.90	28.23	28.61	22.40	23.78	22.80	24.13	24.51
	3H	29.19	30.36	29.60	30.75	31.15	23.74	24.91	24.15	25.31	25.71
	4H	30.48	31.55	30.92	31.96	32.40	24.28	25.34	24.71	25.76	26.19
	6H	31.77	32.70	32.22	33.14	33.59	24.56	25.49	25.01	25.93	26.38
	8H	32.39	33.27	32.85	33.71	34.18	24.59	25.47	25.05	25.91	26.38
	12H	33.08	33.87	33.56	34.35	34.81	24.60	25.40	25.08	25.87	26.34
8H	4H	30.85	31.72	31.31	32.17	32.63	25.23	26.10	25.69	26.55	27.01
	6H	32.33	33.07	32.82	33.55	34.03	25.82	26.55	26.31	27.04	27.52
	8H	33.11	33.78	33.62	34.28	34.77	26.00	26.66	26.50	27.16	27.65
	12H	34.00	34.60	34.51	35.09	35.64	26.10	26.69	26.60	27.18	27.74
12H	4H	30.89	31.68	31.37	32.15	32.62	25.44	26.24	25.92	26.71	27.18
	6H	32.42	33.08	32.93	33.59	34.07	26.17	26.83	26.67	27.34	27.82
	8H	33.30	33.89	33.80	34.38	34.94	26.48	27.07	26.98	27.56	28.12